

# PATENT ABSTRACTS OF JAPAN

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(21)Application number : 60-230403 (71)Applicant : SUMITOMO METAL IND LTD  
(22)Date of filing : 16.10.1985 (72)Inventor : KATSU SHINICHIRO

SUGISAWA SEIICHI  
HAMAMATSU SHIGEKI  
NAKAI SHUJI  
TOYODA MAMORU

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**(54) MANUFACTURE OF ELECTRICAL STEEL SHEET HAVING SUPERIOR SUITABILITY TO BLANKING**

**(57)Abstract:**

**PURPOSE:** To stably obtain an electrical steel sheet having superior magnetic characteristics and satisfactory suitability to blanking by hot rolling and cold rolling a steel having a much higher C content than a conventional electrical steel sheet and by annealing the resulting steel sheet under specified conditions so as to precipitate graphite.

**CONSTITUTION:** A steel consisting of, by weight, 0.1W1.0% C,  $\leq$ 3.5% Si, one or more among  $\leq$ 2.0% Ni,  $\leq$ 1.0% Al and  $\leq$ 1.0% Cu and the balance Fe is hot rolled and cold rolled. The resulting steel sheet is subjected to recrystallization annealing at 600W800° C. By this annealing, a structure necessary for an electrical steel sheet is ensured and graphite is precipitated in the matrix of the steel sheet to improve the suitability to blanking and to prevent deterioration in the magnetic characteristics due to sol. C.